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<110>   O'DOWD, BRIAN F.
        GEORGE, SUSAN R.

<120>   METHOD OF IDENTIFYING TRANSMEMBRANE PROTEIN-INTERACTING COMPOUNDS

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Glu Leu Leu

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gactgcagcc tggtggtacc gcagagcaag ccacatagct gggg              44


<210>  107
<211>  40
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  107
gctgctctcc cacaaaaagt ttaagcggca gaagatctgg                   40
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<210>  108
<211>  40
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  108
ccagatcttc tgccgcttaa actttttgtg ggagagcagc                              40


<210>  109
<211>  21
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<220>
<221>  MISC_FEATURE
<222>  (14)..(14)
<223>  Xaa equals Orn

<400>  109

Thr Val Leu Ala Leu Leu Ser His Arg Arg Ala Leu Lys Xaa Lys Ile
1               5                   10                  15

Trp Pro Gly Ile Pro
            20
<210>  110
<211>  21
<212>  PRT
<213>  Artificial Sequence

<220>

<223>  synthesized

<220>
<221>  MISC_FEATURE
<222>  (14)..(14)
<223>  Xaa equals Orn

<400>  110

Thr Val Leu Ala Leu Leu Ser His Lys Lys Phe Lys Arg Xaa Lys Ile
1               5                   10                  15

Trp Pro Gly Ile Pro
            20

<210>  111
<211>  40
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<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  111
gctcttcggg ctcgagcagc gatgcgaccc tccgggacgg                    40


<210>  112
<211>  39
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  112
ctatcctccg tggtaccgct gctccaataa attcactgc                     39

<210>  113
<211>  37
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  113
cacatcgttc ggaagaagtt taagcggagg ctgctgc                       37

<210>  114
<211>  40
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  114
cctgcagcag cctccgctta aacttcttcc gaacgatgtg                    40


<210>  115
<211>  19
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<400>  115

Arg Arg Arg His Ile Val Arg Lys Arg Thr Leu Arg Arg Leu Leu Gln
1               5                   10                  15

Glu Arg Glu
```

```
<210>  116
<211>  19
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<400>  116

Arg Arg Arg His Ile Val Arg Lys Lys Phe Lys Arg Arg Leu Leu Gln
1               5                   10                  15

Glu Arg Glu


<210>  117
<211>  49
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  117
gaggactctg aacaccgaat tcgccgccat ggacgggact gggctggtg              49


<210>  118
<211>  45
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  118
gtgtggcagg attcatctgg gtaccgcggt tgggtgctga ccgtt                 45


<210>  119
<211>  41
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  119
cctctgagga cctgaaaaag aagagaaagg ctggcatcgc c                    41


<210>  120
<211>  41
<212>  DNA
<213>  Artificial Sequence
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27

<220>
<223> primer

<400> 120
ggcgatgcca gcctttctct tctttttcag gtcctcagag g   41

<210> 121
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 121

Asn Pro Ile Ile Tyr Ala Phe Asn Ala Asp Phe Arg Lys Ala Phe Ser
1   5   10   15

Thr Leu Leu Ser Ser Glu Asp Leu Lys Lys Glu Glu Ala Ala Gly Ile
            20   25   30

Ala

<210> 122
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 122

Asn Pro Ile Ile Tyr Ala Phe Asn Ala Lys Lys Phe Lys Arg Phe Ser
1   5   10   15

Thr Leu Leu Ser Ser Glu Asp Leu Lys Lys Lys Arg Lys Ala Gly Ile
            20   25   30

Ala

<210> 123
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 123
cctagtccgc agcaggccga attcgccacc atggacagca gcacc   45

28

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<210>  124
<211>  44
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  124
gatggtgtga gaccggtacc gcgggcaatg gagcagtttc tgcc                    44


<210>  125
<211>  45
<212>  DNA
<213>  Artificial Séquence

<220>
<223>  primer

<400>  125
cctagtccgc agcaggccga attcgccacc atggacagca gcacc                   45


<210>  126
<211>  45
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  126
ggatggtgtg agaccggtac cgcgggcaat ggagcagttt ctgcc                   45


<210>  127
<211>  30
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  127
gccttcctgg ataaaaaatt caagcgatgc                                    30


<210>  128
<211>  31
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  primer

<400>  128
gcatcgcttg aattttttat ccaggaaggc g                                  31
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```
<210>  129
<211>  7
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<400>  129

Pro Lys Lys Lys Arg Lys Val
1                   5


<210>  130
<211>  8
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<220>
<221>  MISC_FEATURE
<222>  (4)..(14)
<223>  Xaa equals a sequence of any 11 amino acids

<400>  130

Arg Arg Arg Xaa Lys Arg Arg Lys
1                   5

<210>  131
<211>  7
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<220>
<221>  MISC_FEATURE
<222>  (3)..(17)
<223>  Xaa equals a sequence of any 15 amino acids

<400>  131

Lys Lys Xaa Lys Lys Arg Lys
1                   5

<210>  132
<211>  6
<212>  PRT
<213>  Artificial Sequence

<220>

<223>  synthesized
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<400>  132

Lys Arg Lys Arg Arg Pro
1               5


<210>  133
<211>  9
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized


<400>  133

Pro Lys Lys Asn Arg Leu Arg Arg Lys
1               5


<210>  134
<211>  10
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized


<220>
<221>  MISC_FEATURE
<222>  (5)..(24)
<223>  Xaa equals a sequence of any 20 amino acids


<400>  134

Lys Arg Gln Arg Xaa Lys Lys Ser Lys Lys
1               5                   10


<210>  135
<211>  9
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized


<400>  135

Pro Ala Ala Lys Arg Val Lys Leu Asp
1               5


<210>  136
<211>  6
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized
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<400> 136

Gln Arg Lys Arg Gln Lys
1   5

<210> 137
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 137

His Arg Ile Glu Glu Lys Arg Lys Arg Thr Tyr Glu Thr Phe Lys Ser
1   5   10   15

Ile

<210> 138
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 138

Lys Lys Lys Tyr Lys Leu Lys
1   5

<210> 139
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 139

Lys Ser Lys Lys Lys Ala Gln
1   5

<210> 140
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 140

Lys Lys Lys Lys Arg Lys Arg Glu Lys
1   5

<210> 141
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 141

Leu Lys Arg Pro Arg Ser Pro Ser Ser
1   5

<210> 142
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<220>
<221> MISC_FEATURE
<222> (4)..(25)
<223> Xaa equals a sequence of any 22 amino acids

<400> 142

Lys Arg Lys Xaa Lys Glu Leu Gln Lys Gln Ile Thr Lys
1   5   10

<210> 143
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 143

Gly Lys Lys Lys Tyr Lys Leu Lys His
1   5

<210> 144
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthesized

<400> 144

33

Lys Lys Lys Tyr Lys Leu Lys
1   5

<210>   145
<211>   7
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   synthesized

<400>   145

Lys Ser Lys Lys Lys Ala Gln
1   5

<210>   146
<211>   12
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   synthesized

<220>
<221>   MISC_FEATURE
<222>   (4)..(353)
<223>   Xaa equals a sequence of any 350 amino acids

<400>   146

Glu Glu Asp Xaa Lys Lys Lys Arg Glu Arg Leu Asp
1   5   10

<210>   147
<211>   25
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   synthesized

<400>   147

Cys Tyr Phe Gln Lys Lys Ala Ala Asn Met Leu Gln Gln Ser Gly Ser
1   5   10   15

Lys Asn Thr Gly Ala Lys Lys Arg Lys
            20   25

<210>   148
<211>   12
<212>   PRT
<213>   Artificial Sequence

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<220>
<223>   synthesized

<220>
<221>   MISC_FEATURE
<222>   (6)..(328)
<223>   Xaa equals a sequence of any 323 amino acids

<400>   148

Asp Ile Leu Arg Arg Xaa Pro Lys Gln Lys Arg Lys
1               5                   10

<210>   149
<211>   22
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   synthesized

<400>   149

Ser Ser Asp Asp Glu Ala Thr Ala Asp Ser Gln His Ser Thr Pro Pro
1               5                   10                  15

Lys Lys Lys Arg Lys Val
            20

<210>   150
<211>   12
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   synthesized

<220>
<221>   MISC_FEATURE
<222>   (6)..(14)
<223>   Xaa equals a sequence of any 9 amino acids

<400>   150

Arg Lys Lys Arg Lys Xaa Lys Ala Lys Lys Ser Lys
1               5                   10

<210>   151
<211>   7
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   synthesized

<220>
<221>   MISC_FEATURE
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<222>  (3)..(13)
<223>  Xaa equals a sequence of any 11 amino acids

<400>  151
Lys Arg Xaa Lys Lys Leu Arg
1               5


<210>  152
<211>  11
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<220>
<221>  MISC_FEATURE
<222>  (5)..(27)
<223>  Xaa equals a sequence of any 22 amino acids

<220>
<221>  MISC_FEATURE
<222>  (5)..(26)
<223>  Xaa equals any amino acid

<400>  152

Arg Arg Pro Ser Xaa Arg Arg Lys Arg Gln Lys
1               5                   10

<210>  153
<211>  8
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<220>
<221>  MISC_FEATURE
<222>  (4)..(14)
<223>  Xaa equals a sequence of any 11 amino acids

<400>  153

Arg Arg Arg Xaa Lys Arg Arg Lys
1               5

<210>  154
<211>  7
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<220>
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<221>  MISC_FEATURE
<222>  (3)..(12)
<223>  Xaa equals a sequence of any 10 amino acids

<400>  154

Lys Arg Xaa Lys Lys Lys Leu
1               5

<210>  155
<211>  12
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<220>
<221>  MISC_FEATURE
<222>  (5)..(11)
<223>  Xaa equals a sequence of any 7 amino acids

<400>  155

Arg Lys Arg Lys Xaa Arg Arg Ser Arg Tyr Arg Lys
1               5                   10

<210>  156
<211>  9
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<400>  156

Met Ile Ser Glu Ala Leu Arg Lys Ala
1               5

<210>  157
<211>  5
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthesized

<400>  157

Lys Lys Phe Lys Arg
1               5

<210>  158
<211>  9
<212>  PRT
<213>  Artificial Sequence
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<220>
<223>   synthesized

<400>   158

Ala Phe Ser Ala Lys Lys Phe Lys Arg
1   5

<210>   159
<211>   446
<212>   PRT
<213>   Homo sapiens

<400>   159

Met Arg Thr Leu Asn Thr Ser Ala Met Asp Gly Thr Gly Leu Val Val
1   5   10   15

Glu Arg Asp Phe Ser Val Arg Ile Leu Thr Ala Cys Phe Leu Ser Leu
            20   25   30

Leu Ile Leu Ser Thr Leu Leu Gly Asn Thr Leu Val Cys Ala Ala Val
            35   40   45

Ile Arg Phe Arg His Leu Arg Ser Lys Val Thr Asn Phe Phe Val Ile
        50   55   60

Ser Leu Ala Val Ser Asp Leu Leu Val Ala Val Leu Val Met Pro Trp
65   70   75   80

Lys Ala Val Ala Glu Ile Ala Gly Phe Trp Pro Phe Gly Ser Phe Cys
                85   90   95

Asn Ile Trp Val Ala Phe Asp Ile Met Cys Ser Thr Ala Ser Ile Leu
                100   105   110

Asn Leu Cys Val Ile Ser Val Asp Arg Tyr Trp Ala Ile Ser Ser Pro
            115   120   125

Phe Arg Tyr Glu Arg Lys Met Thr Pro Lys Ala Ala Phe Ile Leu Ile
        130   135   140

Ser Val Ala Trp Thr Leu Ser Val Leu Ile Ser Phe Ile Pro Val Gln
145   150   155   160

Leu Ser Trp His Lys Ala Lys Pro Thr Ser Pro Ser Asp Gly Asn Ala

Thr Ser Leu Ala Glu Thr Ile Asp Asn Cys Asp Ser Ser Leu Ser Arg
        180   185   190

Thr Tyr Ala Ile Ser Ser Ser Val Ile Ser Phe Tyr Ile Pro Val Ala
        195   200   205

Ile Met Ile Val Thr Tyr Thr Arg Ile Tyr Arg Ile Ala Gln Lys Gln
    210   215   220

Ile Arg Arg Ile Ala Ala Leu Glu Arg Ala Ala Val His Ala Lys Asn
225   230   235   240

Cys Gln Thr Thr Thr Gly Asn Gly Lys Pro Val Glu Cys Ser Gln Pro
            245   250   255

Glu Ser Ser Phe Lys Met Ser Phe Lys Arg Glu Thr Lys Val Leu Lys
        260   265   270

Thr Leu Ser Val Ile Met Gly Val Phe Val Cys Cys Trp Leu Pro Phe
        275   280   285

Phe Ile Leu Asn Cys Ile Leu Pro Phe Cys Gly Ser Gly Glu Thr Gln
    290   295   300

Pro Phe Cys Ile Asp Ser Asn Thr Phe Asp Val Phe Val Trp Phe Gly
305   310   315   320

Trp Ala Asn Ser Ser Leu Asn Pro Ile Ile Tyr Ala Phe Asn Ala Lys
            325   330   335

Lys Phe Lys Arg Phe Ser Thr Leu Leu Gly Cys Tyr Arg Leu Cys Pro
        340   345   350

Ala Thr Asn Asn Ala Ile Glu Thr Val Ser Ile Asn Asn Asn Gly Ala
        355   360   365

Ala Met Phe Ser Ser His His Glu Pro Arg Gly Ser Ile Ser Lys Glu
        370   375   380

Cys Asn Leu Val Tyr Leu Ile Pro His Ala Val Gly Ser Ser Glu Asp
385   390   395   400

```
Leu Lys Lys Glu Glu Ala Ala Gly Ile Ala Arg Pro Leu Glu Lys Leu
            405               410               415

Ser Pro Ala Leu Ser Val Ile Leu Asp Tyr Asp Thr Asp Val Ser Leu
            420               425               430

Glu Lys Ile Gln Pro Ile Thr Gln Asn Gly Gln His Pro Thr
            435               440               445
```